	Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur
Meghalaya -	ICAR Research Complex for North-East Region, Shillong
Orissa -	Central Rice Research Institute, Cuttack; Orissa University of Agriculture and Technology, Bhubaneshwar
Punjab -	Punjab Agricultural University, Ludhiana
Rajasthan -	National Research Centre on Rapeseed Mustard, Bharatpur
Tamil Nadu -	Tamil Nadu Agricultural University, Coimbatore and Madurai Kamraj University, Madurai
Uttar Pradesh -	National Botanical Research Institute, Lucknow; Indian Institute of Vegetable Research, Varanasi; Indian Institute of Pulses Research, Kanpur
Uttaranchal-	Vivekanand Paravatiya Krishi Anusandhan Sansthan, Almora; Govind Ballabh Pant University of Agriculture and Technology, Pantnagar
West Bengal -	Bose institute, Kolkata and Indian Institute of Technology, Kharagpur.

In private sector, a few seed companies are also engaged in developing GM seeds and their field evaluation.

(c) Biotechnological interventions have enormous potential for developing crop varieties tolerant/resistant to various biotic and abiotic stresses, and supplementing the conventional breeding efforts. The GM crops have already benefited agriculture sector in some of the countries in the world. Therefore, it appears that GM crops have a lot of potential in improving the productivity of our crops.

Equipment for weather forecasts

683. SHRI M.V. MYSURA REDDY: Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether it is a fact that after spending lots of money on purchase

of equipment relating to weather forecasts, Meteorological Department has earned notoriety in not giving correct weather forecasts;

(b) if so, whether it is due to incompetent manpower or lack of equipment;

(c) if so, the action taken against persons manning the weather forecasts division and to update the equipment; and

(d) if not, the reasons for wrong weather forecasts and action Government propose to take so that credibility of the department is restored?

THE MINISTER OF EARTH SCIENCES (SHRI KAPIL SIBAL): (a) to (d) It is not correct to say that the weather forecasts given by India Meteorological Department (IMD) are incorrect. Actually there is no such thing as an incorrect weather forecast. Every forecast has a merging of error and the endeavor of scientists always is to reduce this margin of error through use of technology. Weather forecasts are made on the basis of meteorological observations and using these observations in a suitable model. The accuracy of the forecast or the margin of error depends on how dense the observational network is and how well suited the model in use is for the area for which the weather forecaste is being made.

The problem which India Meteorological Department (IMD) is facing is that not enough investment has been made in the area of instrumentation over the years to make the observation network dense. Apart from this significant R & D efforts is also lacking in the area of developing a suitable model for the weather systems in this part of the world. It is a fact that in our region meso-scale systems often develop suddenly and display erratic behaviour as compared to the extra-tropical regions, which are characterized by frontal type of weather systems displaying systematic development and movement. Hence weather forecasting in our country is different and more difficult.

The major step which has been taken to improve the situation is the creation of Ministry of Earth Sciences which has an endeavor to bring ocean and atmospheric observations together and also generate better weather forecast. The Government now has a plan to not only significantly density the observational network but also technologically-upgrade it

through installation of equipment such as Doplar Weather Radar, Automatic Rain Gauges, Wingh Profilers, etc. In addition a Memorandum of Understanding with METEO, France (the Frence Meteorological Agency) has been signed out to jointly work on Modeling and strenghtening the IT infrastructure to improve the capabilities of IMD. IMD will have a relatively modern and well equippped forecasting system by the end of 2008.

In view of the above it is clear that persons manning the weather forecast division are not a fault and there is no need to take action against them.

Proposal for single window clearance

†684. MISS ANUSUIYA UIKEY: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether a proposal for "single window clearance" under the Charimanship of a Scientist alongwith members of many Ministries has been made to sanction G.M. crops as per the National Biotechnology Strategy Development Document;

(b) if so, whether this proposal will be accepted; and

(c) whether the Indian farmers will be affected by accepting this proposal?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) and (b) As per the draft National Biotechnology Development Strategy document, it has been suggested to establish a Single Window Clearance Mechanism for all biotech products. The draft strategy document has been circulated to all stake holder Ministries/departments for their comments. In principle the Ministry of Agriculture and Ministry of Environment and Forests have accepted the establishment of National Biotechnology Regulatory Authority for single window clearance mechanism for all biotech products including Genetically Modified crops.

(c) Establishment of a single window clearance mechanism through National Biotechnology Regulatory Authority would not affect in any way the interests of the Indian farmers.

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† Original notice of the question was received in Hindi.